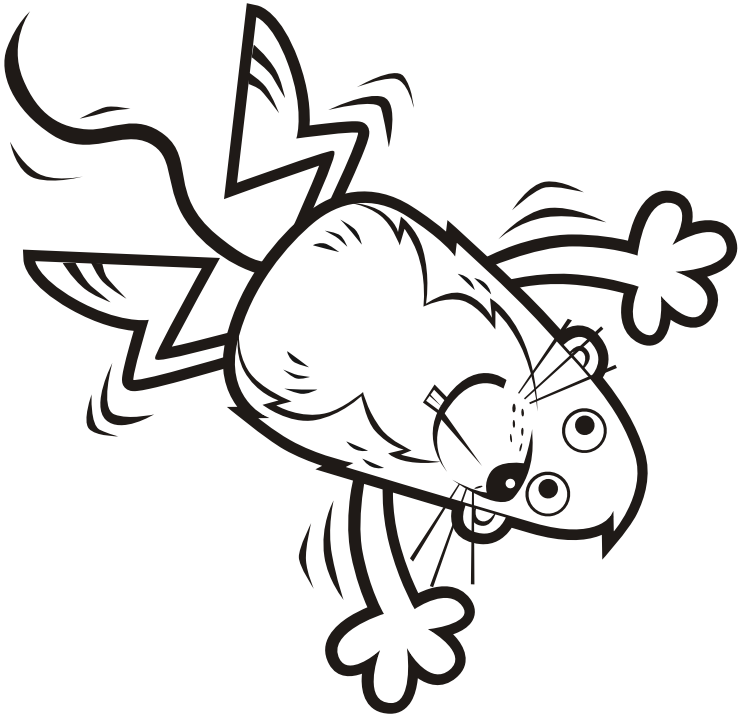
Information pack

The Falkirk Wheel

wild over waterways



Are you interested in learning about Britain's canals? Read this booklet to find out about the world's first and only rotating boat lift!

www.wow4water.net

Information sheet 1

The Falkirk Wheel

People queue to join the trip boat.

The Falkirk Wheel provides the link between the Union Canal and the Forth and Clyde Canal so that boats travelling on one canal can cross to the other.

Why was it built?

In order to understand why The Falkirk Wheel was built it is important to know some history of the canals.

The Forth and Clyde Canal was opened in 1790 to provide a route from the west coast of Scotland to the east. The Union Canal opened in 1822 and provided a link from Edinburgh to Falkirk.

At Falkirk both canals met, but the Union Canal was higher than the Forth and Clyde Canal. A flight of 11 locks was built to connect the two waterways at Falkirk.

In time both canals fell into disrepair and in 1933 the lock flight at Falkirk was filled in.

Information sheet 2

The Falkirk Wheel

On top of the world!

The rise of The Falkirk Wheel

In the 1990s, money was found to restore the Union and the Forth and Clyde Canals. The restoration of the canals was known as the Millennium Link and it cost £84.5 million to reopen the bridges and clear the blockages on both canals.

A major problem that faced the engineers was how to link both canals as the original site of the locks had been built on. Another flight of locks could have been built, but locks are slow to use and the engineers wanted a quicker method. It was decided to build something new to lift boats through the height difference of the canals.

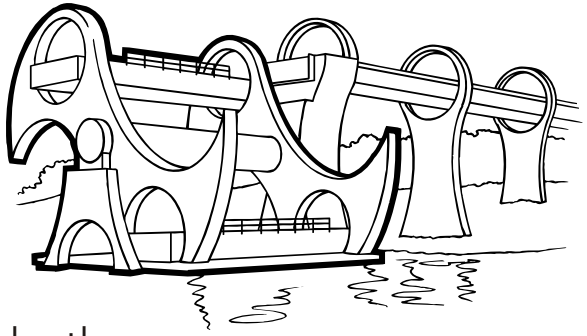
The design of the lift at Falkirk was revolutionary - it was for a wheel which turned to carry boats between the canals. The Falkirk Wheel was opened by the Queen in May 2002 and has carried over 230 000 people in two years! The Falkirk Wheel is a 21st century design for 21st century Scotland!

Information sheet 3

The Falkirk Wheel

The Falkirk Wheel and Visitor Centre.

How does it work?

The Falkirk Wheel has two gondolas full of water. A boat wishing to travel up through the lift enters the lower gondola from the canal basin. The gates on the gondola are then closed and the lift rotates until the lower gondola is level with the aqueduct at the top of the lift. Then the gates on the gondola are opened and the boat is able to travel along the aqueduct, through a tunnel under the Antonine Wall and up through 2 locks on the Union Canal.

The Falkirk Wheel lifts 600 tonnes each time it is used and can carry up to 8 boats at a time. The Falkirk Wheel is powered by 10 motors and it takes just 5 minutes to rotate 180 degrees. Only a small amount of energy, about the same as boiling 2 kettles, is needed to turn it. The Falkirk Wheel is 35 m high which is the equivalent of 8 double decker buses on top of each other.